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ABSTRACT

A survey of 197 regular education teachers representing 35 states indicated few changes in structural arrangements or adaptive instruction as a function of having handicapped students in their classes. Elementary and secondary level teachers completed a 2-page survey which explored the use of other adults in the classroom, size of instructional groups, primary method of instruction used, and degree of classroom structure. Number of adults used in the classroom differed from what it typically would be for only 26 percent of respondents. Sixty percent reported direct instruction as the preferred method for handicapped students. More than half reported that the degree of classroom structure (typically described as "highly structured") would not change if handicapped students were not present. Adaptive instructional techniques were almost unanimously viewed as desirable, with teachers at both elementary and secondary levels indicating that the most desirable approach is holding the student accountable for performance and quality of work. It is concluded that regular education teachers either do not see a way to make the classroom environment different from what it would be without a handicapped student, or are unable to implement potential changes. A copy of the survey is appended. (JW)

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University of Minnesota

RESEARCH REPORT NO. 8

REGULAR EDUCATION TEACHERS' PERCEPTIONS OF INSTRUCTIONAL ARRANGEMENTS FOR STUDENTS WITH MILD HANDICAPS

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INSTRUCTIONAL ALTERNATIVES PROJECT

January, 1988

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Abstract

Nearly 200 regular education teachers from across the nation provided information on instructional arrangements they use with "mildly handicapped" students assigned to their classes. They reported their use of other adults in the classroom, instructional grouping practices, primary methods of instruction, degree of classroom structure, and adaptive instruction. These teachers, on the average, noted few differences in structural arrangements and adaptive instruction as a function of having handicapped students in their classes. Differences were noted primarily as a function of grade level of students (elementary vs. secondary) and, minimally, as a function of geographic location. Implications of these findings for services for handicapped students are discussed.

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Regular Education Teachers' Perceptions of Instructional Arrangements for Students with Mild Handicaps

Increasing numbers of children with mild learning problems are being identified as handicapped and eligible for special education services. When this occurs, however, most of these students continue to spend the majority of their school day in mainstream classrooms. Essentially, their education is the responsibility of the mainstream teacher, who is faced with the added problem of having to devise educational arrangements for students who leave the classroom for anywhere from 30 minutes to three hours to receive services from a special education professional. We assume that teachers in such mainstream settings use a variety of instructional procedures and arrangements for these students.

In fact, we know very little about the instructional arrangements teachers use for mildly handicapped students in regular education settings, and very little about the effectiveness of various instructional arrangements. About the only factors for which we have some information are related to class size or student-teacher ratio (Ysseldyke, Thurlow, & Wotruba, 1987), and grouping practices (Ysseldyke, Thurlow, Christenson, & McVicar, in press).

This study was undertaken to obtain information from a national sample of teachers about the types of instructional arrangements used in regular education classrooms for students with mild handicaps. Two fundamental types of instructional arrangements were given primary attention: "structural arrangements" and "adaptive instruction."

Method

Subjects were 197 full-time regular education teachers who served mildly handicapped students in their regular education classrooms. The teachers represented 35 states, which included all nine geographic division classifications used by the U.S. Bureau of Census (see Table 1). Sixty-eight percent of the sample indicated that they worked in elementary settings and 32% specified secondary/middle school settings. Over two-thirds of the teachers indicated that the socioeconomic level of the majority of the students served in their schools was either "low to moderate" (43.1%) or "moderate" (28.4%); the categories of "moderate to high," "low," and "high" were checked by 17.3%, 9.6%, and 1.0%, respectively; one respondent did not indicate students' socioeconomic status (see Table 2).

The majority of the respondents (53.3%) indicated that they served between one and five mildly handicapped students, with two (15.2%), three (12.7%), and four (10.7%) being the most frequently reported numbers of students served. With the exception of one respondent, all teachers reported serving fewer than 25 mildly handicapped students (see Table 3). One secondary level teacher reported having 75 mildly handicapped students. This number, though much higher than those reported by all of the others, was still possible depending upon how classes were scheduled. On the other hand, it is possible that an error occurred in subject selection procedures, and that this teacher was not a regular education teacher, but rather a resource room teacher, a consultant, or some other specialized staff member. Approximately 78% of the respondents indicated that they served learning disabled students; approximately 39% served emotionally disturbed or emotionally/behaviorally disordered students, 35%

Table 1

Geographic Distribution of Respondents

Geographic Region	State	Number of Respondents	Percentage of Respondents[a]
Mountain		35	18.1
	Colorado	17	8.8
	Wyoming	7	3.6
	Arizona	6	3.1
	Montana	5	2.6
West North Central		31	16.1
	Minnesota	8	4.2
	South Dakota	8	4.2
	Kansas	7	3.6
	North Dakota	5	2.6
	Missouri	3	1.5
New England		24	12.4
	New Hampshire	13	6.7
	Maine	4	2.1
	Vermont	4	2.1
	Rhode Island	3	1.5
South Atlantic		21	10.9
	Georgia	5	2.6
	Florida	4	2.1
	South Carolina	4	2.1
	Virginia	4	2.1
	Delaware	3	1.5
	Maryland	1	.5
West South Central		20	10.4
	Arkansas	11	5.7
	Texas	5	2.6
	Oklahoma	4	2.1
Middle Atlantic		18	9.4
	Pennsylvania	8	4.2
	New Jersey	6	3.1
	New York	4	2.1
East North Central		17	8.7
	Indiana	7	3.6
	Michigan	7	3.6
	Ohio	2	1.0
	Illinois	1	.5
Pacific		15	7.8
	Oregon	8	4.2
	Washington	6	3.1
	Alaska	1	.5
East South Central		12	6.2
	Tennessee	5	2.6
	Kentucky	4	2.1
	Mississppi	3	1.5

[a]Based on 193 surveys; 4 were not identified.

Table 2

Socioeconomic (SES) Levels of Students Served by Respondents

SES Level	Number Checking Category	Percentage of Respondents
Low	19	9.6
Low-to-Moderate	85	43.1
Moderate	56	28.4
Moderate-to-High	34	17.3
High	2	1.0
No response	1	.5

[a]Based on 197 cases.

Table 3

Total Number of Students on Respondents' Caseloads Classified as "Mildly Handicapped"[a]

Number of Students	Number of Respondents	Percentage of Respondents[a]
1-5	105	53.5
6-10	37	18.9
11-19	22	11.0
24	1	.5
75	1	.5

[a]Reported frequencies and percentages are based on 197 respondents. However, percentages do not equal 100 and frequencies do not equal 197 due to the omission from this table of the 31 respondents who either did not respond to this question or who responded with "0".

served students with speech impairments, and 30% served students labeled as mildly mentally retarded. An "other" category, which included vision and hearing impaired, physically disabled, gifted, English as a Second Language, and others, was checked by a total of 17.2% of the subjects (see Table 4).

Materials

The two-page survey developed for this study was based on the literature in the field of Adaptive Education/Adaptive Instruction, which focuses on the use of alternative instructional arrangements to meet the diverse needs of individual students within regular education classrooms. The survey asked for information about the students served by the respondents and the respondents' practices and opinions concerning "structural arrangements" and "adaptive instruction" in their classrooms. A copy of the survey can be found in the Appendix.

Procedure

Possible subjects for this study were solicited through 240 special education teachers from across the country who had responded to an earlier survey on student-teacher ratios in special education classrooms (see Thurlow et al., 1987). The original sample of special education teachers was identified through state and district level special education offices. Each of the 240 special education teachers who responded to a student-teacher ratio survey was sent two of the surveys developed for the current study, and was asked to distribute them to two regular education teachers who served mildly handicapped students in their classrooms. Of the 480 surveys sent out for distribution to the special education teachers, 197 surveys were completed and returned by the regular education teachers, accounting for a return rate of 41%.

Table 4

Categories of Handicapped Students Served by Respondents

Category	Percentage Checking Category[a]	Students Served[b]	
		Average Number	Modal Number
Learning Disabled	78.2	5.3	2.0
Emotionally Disturbed or Emotionally/Benaviorally Disordered	39.1	2.4	1.0
Mildly Mentally Retarded	29.9	2.4	1.0
Speech Impaired	35.0	2.2	1.0
Other[c]	17.2	1.0	1.0

[a]Total percentage is greater than 100 because teachers were not limited in the number of categories they could endorse.

[b]The figures in these columns reflect only the responses of those teachers who indicated they served students in the disability category.

[c]These figures include the following categories: physically handicapped (2.0); English as a Second Language (1.5); gifted (.5); vision, hearing impaired (8.1); and Adaptive PE, Title I, multiple handicaps, and "special needs" (5.1).

Results

Structural Arrangements

Teachers were asked about the structural arrangements they used for handicapped students in their classrooms in terms of four variables: (a) the use of other adults in the classroom, (b) the size of groups used for instruction, (c) the primary method of instruction used, and (d) the degree of structure in the classroom. Almost one-half of the sample indicated that some other adult(s) helped out in their classrooms. The "other adults" most frequently mentioned were aides (14.7%), other teachers (17.6%), and volunteers (17.1%). Thirty-seven percent of the sample said that no other adults were used in their classrooms, and 14.7% did not respond. When the subjects were asked whether their reported use of other adults differed from what it would be if they had no handicapped students in their classrooms, 56% indicated that it did not differ, while 26% reported that it did. Eighteen percent of the sample did not respond (see Table 5).

Teachers were asked to indicate the size of the small groups they used for instruction. Of those indicating group size, the greatest number of respondents specified sizes of four to six students (16.8% of the total sample) and one to three students (13.7% of the total sample). Eight percent of the respondents said that they individualized instruction and 11.1% gave group sizes of 10 or more. Nineteen percent did not respond to this question, 6.6% reported that they did not use small groups, and 18.3% implied that they used small groups for instruction, but did not report a group size (see Table 6). Just over half of the sample (51.3%) indicated that their use of small groups for instruction, and the corresponding size of the group, did not differ from what

Table 5

Structural Arrangements: Other Adults Used in Classrooms by Regular Education Teachers when Handicapped Students are Present

Adult Used	Number of Respondents	Percentage of Respondents
No other adults used	73	37.1
Aide(s)	29	14.7
Unnamed Adult[a]	26	13.2
Another teacher	15	17.6
Volunteer	14	17.1
Tutor	8	4.1
Counselor	1	.5
Paraprofessional	1	.5
Student teacher	1	.5
No response	29	14.7
"Does this differ from what you would do if no handicapped students were in your classroom?"		
Yes	52	26.4
No	110	55.8
No response	35	17.8

[a]Respondents described activities performed by adult(s), but did not "name" them.

Table 6

Structural Arrangements: Size of Small Groups used for Instruction by Regular Education Teachers when Handicapped Students are Present

Group Size	Number of Respondents	Percentage of Respondents
Individualized	16	8.1
1-3 students	27	13.7
4-6	33	16.8
7-9	12	6.1
10-12	5	2.5
13-15	9	4.6
16-18	4	2.0
19-20	3	1.5
21+	1	.5
Indicated use of small groups but did not give size	36	18.3
Did not use small groups	13	6.6
No Response	38	19.3
"Does this differ from what you would do if no handicapped students were in your classroom?"		
Yes	77	39.1
No	101	51.3
No response	19	9.6

it would be if they had no handicapped students in their classes; 39.1% indicated that these patterns of group structure and size would change if no handicapped students were involved.

Respondents were asked to name up to two primary methods of instruction tnat they used for the handicapped students in their classes. The most frequently named method was "direct instruction" (named by 60% of the sample). Other frequently mentioned methods included cooperative/group (20.4%), discovery (17.8%), independent (17.3%), and multi-method (12.2%). Nine percent of the sample did not respond. (The total percentage is greater than 100 because up to two methods per teacher were recorded; see Table 7.) Almost 60% of the sample said that they would not change their methods of instruction if no handicapped students were present, while 35.5% said that they would change their methods of instruction (see Table 7).

When asked about the degree of structure they used for the handicapped students in their classrooms, over 40% of the sample indicated that their classrooms were highly or extremely structured. Approximately 14% of the sample used words such as "moderate" or "a lot" to describe the degree of structure in their classrooms, while only 4.1% used words like "low," "open," or "flexible." Many respondents indicated that the degree of structure they imposed depended on some variable such as the curriculum or subject matter (4.6%) or the "learning style" (2.5%). (See Table 8.) More respondents than not (55.3% vs. 34.5%) indicated that the degree of structure did not differ from what it would be if no handicapped students were in the classrooms.

Table 7

Structural Arrangements: Primary Methods of Instruction Used by Regular Education Teachers when Handicapped Students are Present

Method	Number of Respondents	Percentage of Respondents[a]
Direct	118	59.9
Cooperative (group)	40	20.4
Discovery	35	17.8
Independent	34	17.3
Multi-method	24	12.2
Tactile	6	3.0
Other	5	2.5
No Response	18	9.1
"Does this differ from what you would do if no handicapped students were present in your classroom?"		
Yes	70	35.5
No	118	59.5
No response	9	4.6

[a]Total is greater then 100% because teachers were allowed to name two methods.

Table 8

Structural Arrangements: Degree of Structure used by Regular Education Teachers when Handicapped Students are Present in the Classroom.

Degree of Structure	Elementary	Secondary
"Highly"/"Extremely"/"Very"	83	42.1
"Moderate"/"Much"/"A lot"	27	13.7
"Low"/"Open"/"Flexible"	8	4.1
"Dependent on Instructional Techniques, Learning Centers"	11	5.6
"Structure Depends on Disability Served"	9	4.6
"Depends on Curriculum/Subject Matter"	9	4.6
"Traditional"/"Self-Contained"/ "Structure with Least Distractions"	5	2.5
"Depends on Learning Style/ Individual Performance"	5	2.5
"Quiet Environment with High Expectations"	3	1.5
No scorable response or blank	37	18.8
"Does this differ from what you would do if no handicapped student were present in your classroom?"		
Yes	68	34.5
No	109	55.3
No Response	20	10.2

Adaptive Instruction

Fifteen statements describing various instructional adaptations were included in the survey (see page 2 of the survey in appendix). The respondents were asked to rate each statement on a scale of 1 to 7 (with "1" being low and "7" being high) on two dimensions: (a) the desirability of the adaptation, and (b) the extent to which the teacher is able to make the adaptation in his or her classroom. In general, the teachers found all of the adaptations highly desirable; the modal response for each statement was "7," and average "desirability" ratings for all 15 statements ranged from 5.5 to 6.6. The two adaptations receiving the highest average "desirability" ratings were "holding student accountable for his/her performance and quality of work" (average rating = 6.6), and "altering instruction so that the student can experience success" (average rating = 6.4). In relative terms, the two least desirable adaptations were "modifying tasks until student makes no errors or only infrequent mistakes" (average rating = 5.5), and "using other goals to instruct failing student" (average rating = 5.6) (see Table 9).

Overall, teachers' ratings of their own ability to make the preferred adaptations were lower than the adaptations' "desirability" ratings; in fact, all 15 t tests comparing average "desirability" and "able to do" ratings for each item were significant at the .001 level. Average "able to do" ratings ranged from 4.1 to 5.8, with modal ratings from 4 to 7. The adaptation that teachers were, on the average, most able to carry out in their classrooms (average rating = 5.8) was also the adaptation that received the highest average "desirability" rating: holding student accountable for his/her performance and quality of work. The adaptation with the second highest average "able to do"

Table 9

Adaptive Instruction: Teachers' Reports of the Desirability of Various Instructional Adaptations for Handicapped Students and the Extent to which they are Able to Make the Adaptation in their Classrooms[a]

	Desirability		Able-to-Do	
	Mean	Mode	Mean	Mode
1. Altering instruction so student can experience success	6.36	7.0	4.95	5.0
2. Identifying alternative instructional modifications for teaching students	6.13	7.0	4.68	5.0
3. Identifying alternative ways to manage student behavior or affect	6.14	7.0	5.01	5.0
4. Modifying curricula in a variety of ways	5.85	7.0	4.68	5.0
5. Using alternative methods to instruct failing student	6.24	7.0	4.69	5.0
6. Using different materials to instruct failing student	5.90	7.0	4.49	5.0
7. Using other goals to instruct failing student	5.65	7.0	4.56	5.0
8. Using increased practice opportunities	6.16	7.0	5.09	6.0
9. Using alternative group placements	5.71	7.0	4.51	4.0
10. Adjusting lesson pace to meet student's rate of mastery	6.16	7.0	4.67	5.0
11. Monitoring of student's errors and prescribing activities to correct responses	6.24	7.0	4.95	5.0
12. Modifying tasks until student makes no errors or only infrequent mistakes	5.46	7.0	4.09	4.0
13. Monitoring effectiveness of alternative interventions	5.71	7.0	4.28	4.0
14. Informing student frequently of his/her instructional needs	5.75	7.0	5.02	4.0
15. Holding student accountable for his/her performance and quality of work	6.55	7.0	5.80	7.0
Averages:	6.00	7.0	4.76	4.9

[a]Rating scale ranged from 1 (low) to 7 (high). All 15 t-tests between average "desirability" and "able-to-do" ratings for each item were significant at the .000 level. Sample sizes for the t-tests ranged from 187 to 195.

rating (5.1) was "using increased practice opportunities." The statement that received the lowest "desirability" rating, "modifying tasks until student makes no errors or only infrequent mistakes," also received the lowest average "able to do" rating (4.1). Also receiving low "able to do" ratings (average rating = 4.3) was the statement "monitoring effectiveness of alternative interventions". (See Table 9 for complete summary data.)

Comparison of Elementary and Secondary Teachers' Responses

Several differences were found between the response patterns of those teachers who identified themselves as working in elementary school settings (68% of the total sample; n = 134) and those who stated that they worked in secondary/middle school settings (32%; n = 63). According to teacher reports, the students served by the elementary teachers were, on the average, of a lower socioeconomic level than were the secondary/middle school students. A greater percentage of elementary school teachers than secondary/middle school teachers estimated the socioeconomic level of their schools' students to be "low" or "low to moderate," while the pattern was reversed when the socioeconomic designations were "moderate," "moderate to high," and "high" (see Table 10 for responses).

The secondary/middle school regular education teachers reported having, on the average, more "mildly handicapped" students in their classes than did the elementary teachers. Secondary/middle teachers reported having an average of 9.4 "mildly handicapped" students, while the average for an elementary teacher was 4.3 (see Table 11). Almost two-thirds (62.7%) of the elementary school respondents served a total of between one and five mildly handicapped students; only 33.3% of the secondary school respondents reported such small numbers. Nearly 32% of the secondary/middle teachers reported having between 6 and 10

Table 10

Comparison of Student Socioeconomic Status
by Elementary and Secondary School Level

SES	Elementary N	Elementary %	Secondary/Middle N	Secondary/Middle %
Low	19	14.2	0	0.0
Low to Moderate	59	44.0	26	41.3
Moderate	34	25.4	22	34.9
Moderate to High	21	15.7	13	20.6
High	0	0	2	3.2

Table 11

Regular Education Teacher Caseloads of Mildly Handicapped Students

Total Number	Percentage of Elementary Teachers[a]	Percentage of Secondary Teachers[b]
0	6.0	6.3
1-5	62.7	33.3
6-10	12.7	31.7
11+	6.5	23.8
No response	11.9	4.8
Mean	4.3	9.4
Mode	2.0	4.0

[a]% based on 134 cases

[b]% based on 63 cases

mildly handicapped students; 23.8% had 11 or more students. Only 12.7% and 6.5%, respectively, of the elementary teachers had as many mildly handicapped students (see Table 11). About 6% of both levels of teachers gave a response of "0" when asked for the total number of students in their classes classified as "mildly handicapped." However, each of these 12 respondents did indicate serving some children within specific disability categories. It is possible that these children had not been formally classified, or that they had handicaps of a moderate or severe degree.

Over two-thirds of both elementary (76.9%) and secondary/middle school (81.0%) teachers reported having learning disabled (LD) students; however, secondary/middle teachers had a larger average number of LD students than the elementary teachers (8.5 compared to 3.7). More secondary/middle teachers than elementary teachers reported serving some number of both emotionally/behaviorally disordered (EBD) students (49% vs. 34%) and mildly mentally retarded (MMR) students (35% vs. 28%); and, on the average, they also served larger numbers of those students. The two populations that more elementary teachers than secondary/middle teachers mentioned serving were speech impaired (42% vs. 19%) and sensory impaired (i.e. vision and hearing) students (11% vs. 2%)(see Table 12).

Use of other adult aides in classrooms. On the average, over 50% of elementary teachers used some other adult in the classroom while only about 35% of secondary/middle school regular education teachers reported having some additional assistance during their classroom instruction (see Table 13). Of the elementary level regular education teachers reporting additional assistance, 16.4% used an adult teacher's aide; 9.7% used volunteers; 6.0% used another

Table 12

Profile of Handicapped Students Served by Regular Education Teachers in Regular Education Classrooms

Disability Category	% of Teachers Serving Some Number of Students[a]		Average Number[b]		Modal Number[b]	
	Elementary	Secondary	Elem	Sec	Elem	Sec
Learning Disabled	76.9	81.0	3.7	8.49	2.0	6.0
Emotionally/Disturbed Emotionally/Behaviorally Disordered	34.3	49.2	1.6	3.55	1.0	2.0
Mildly Mentally Retarded	27.6	34.9	1.8	3.36	1.0	1.0
Speech Impaired	42.5	19.0	2.2	2.25	1.0	1.0
Other[c]	17.2	17.5	2.4	2.60	2.0	1.0

[a] Total percentage is greater than 100 because teachers were not limited in the number of categories they could endorse.

[b] The figures in these columns reflect only the responses of those teachers who indicated they served students in the disability category.

[c] These figures include the following categories: physically handicapped, English as a Second Language, sensory impairments and gifted.

Table 13

Structural Arrangements: Other Adults Used in Classrooms by Elementary and Secondary/Middle Teachers When Handicapped Students are Present

Adult(s) Used	Elementary	Secondary
No Other Adult Used	33.6	44.4
Aide	16.4	11.1
Volunteer	9.7	1.6
Another Teacher	6.0	11.1
Tutor	4.5	3.2
Counselor	.7	0
Student Teacher	.7	0
Paraprofessional	.7	0
Unspecified Other[a]	15.7	7.9
No Response	11.9	20.6
"Does this differ from what you would do if no handicapped students were present in your classroom?"		
Yes	27.6	23.8
No	58.2	50.8
No Response	14.2	25.4

[a]Respondent mentioned duties/activities performed by adult, but did not name

teacher; 4.5% used a tutor, and 15.7% had some other, unspecified, adult assistance. Counselors, student teachers, and paraprofessionals were, each, reportedly used by less than 1.0% of responding teachers. Thirty-three percent reported that they used no other adult in the classroom.

Secondary/middle level regular education teachers used an adult aide in the classroom less frequently than did the elementary level teachers: 11.1% reported using an adult aide; 1.6% reported using volunteers; 11.1% reported using another teacher; 3.2% reported using a tutor; and 7.9% reported using an unspecified "other adult." Counselors, students, or paraprofessionals were not used by these respondents. Almost half of the secondary/middle school level respondents (44.4%) reported not using another adult in their classrooms.

Instructional arrangement and size of groups. About one-fourth of elementary level teachers (27.6%) and secondary level teachers (23.8%) reported a difference in their instructional arrangements as a result of serving handicapped students in their classrooms. However, the majority of both elementary (58.2%) and secondary (50.8%) teachers reported no difference in their classroom instructional arrangements when serving handicapped students.

Elementary and secondary level regular education teachers reported that a group range of between one to three or four to six students represented typical sizes for instructional groups (see Table 14). Less than 10% of elementary teachers (9.0%) and secondary/middle school teachers (6.3%) reported using individualized instruction when handicapped students were present in their classes. The group sizes reported most often by elementary level teachers were one to three students (14.9%) and four to six students per group (21.6%). The group size reported most often by secondary/middle school level teachers was one

Table 14

Structural Arrangements: Size of Small Groups Used for Instruction by Elementary and Secondary/Middle School Teachers When Handicapped Students are Present

Group Size	Elementary	Secondary
Individualized	9.0	6.3
1-3 students	14.9	11.1
4-6	21.6	6.3
7-9	6.7	4.8
10-12	1.5	4.8
13-15	2.2	9.5
16-18	.7	4.8
19-20	1.5	1.6
21+	0	1.6
"Does this differ from what you would do if no handicapped students were present in your classroom?"		
Yes	38.8	39.7
No	53.0	47.6
No Response	8.2	12.7

to three students (11.1%). No groups of over 20 students were reported by elementary teachers.

Primary methods of instruction. Elementary and secondary level teachers were asked to designate their primary method of instruction when handicapped students were present in the classroom (see Table 15). Over half of both the elementary teachers (61.9%) and the secondary teachers (55.6%) reported using direct methods of instruction. Cooperative group instruction was used by 21.7% of the elementary teachers and 17.5% of the secondary level teachers. Higher percentages of secondary than elementary teachers reported using "discovery" (25.4% vs. 14.2%) and "independent" (23.8% vs. 14.2%) methods of instruction. A multi-method approach was reported more frequently by elementary level teachers (14.4%) than by secondary level teachers (9.5%) as a primary method of instruction.

The primary methods of instruction reported by elementary and secondary regular education teachers when handicapped students were present in their classroom were ranked slightly differently. For elementary teachers, the order of frequency was: (1) direct method, (2) cooperative group method, (3) multi-method, (4 & 5) direct and discovery methods, and (6) tactile methods. The order for secondary teachers was: (1) direct method, (2) discovery method, (3) independent study method, (4) cooperative group method, (5) multi-method, and (6) tactile methods, respectively.

When asked whether the primary method of instruction differed when handicapped students were present in the classroom, 35.8% of elementary level and 34.9% of secondary level teachers reported "yes." Most teachers in both groups (58.2% and 63.5%) indicated that the primary method of instruction did not differ when handicapped students were in the classroom.

Table 15

Structural Arrangements: Primary Methods of Instruction Used by Elementary and Secondary/Middle School Teachers When Handicapped Students are Present

Method	Elementary	Secondary
Direct	61.9	55.6
Cooperative (Group)	21.7	17.5
Discovery	14.2	25.4
Independent	14.2	23.8
Multi-Method	14.4	9.5
Tactile	1.4	1.6
Other	3.0	1.6
No Response	9.0	9.5
"Does this differ from what you would do if no handicapped students were present in your classroom?"		
Yes	35.8	34.9
No	58.2	63.5
No Response	6.0	1.6

[d]Total percent is greater than 100 because teachers were allowed to name two methods.

Very little variability was found when comparing elementary and secondary level teachers on the degree of structure in the classroom. Over 42% and 41%, respectively, indicated that their classrooms were "highly or extremely" structured when handicapped students are present. Differences noted were that 7.9% of secondary level respondents versus 3.0% of elementary level respondents indicated that "structure depends on the disability served." Another area of difference in degree of structure between elementary and secondary level respondents was dependent on "curriculum subject matter" (3.0% vs. 6.3%) and "learning style and individual performance" (.7% vs. 6.3%), respectively (see Table 16).

Adaptive instruction. The respondents were asked to rate, on a Likert type scale, the desirability of using, and their ability to use, adaptive instructional techniques in their classrooms (see Table 17). Elementary and secondary teachers varied in a number of areas, and the difference for some items reached significance at the .05 level.

Elementary level teachers generally responded to the desirability of using adaptive instructional methods in a slightly more positive manner than did the secondary level teachers. On the average, elementary teachers more often than secondary teachers indicated significantly greater desirability for: (a) identifying alternative ways to manage a student's behavior or "affect"; (b) using alternative methods to instruct failing students; (c) using different materials to instruct failing students; and (d) using an alternative group placement.

Altering instruction so that the student can experience success, modifying the curriculum in a number of ways, adjusting the lesson pace to meet a

Table 16

Structural Arrangements: Degree of Structure Used by Elementary vs Secondary/Middle Teachers When Handicapped Students are Present

Degree of Structure	Elementary	Secondary
"Highly"/"Extremely"/"Very"	42.5	41.3
"Moderate"/"Much"/"A lot"	13.4	14.3
"Low"/"Open"/"Flexible"	3.7	4.8
"Dependent on Instructional Techniques, Learning Centers"	5.2	0
"Structure Depends on Disability Served"	3.0	7.9
"Depends on Curriculum/Subject Matter"	3.0	6.3
"Traditional"/"Self-Contained"/ "Structure with Least Distractions"	2.2	3.2
"Depends on Learning Style/ Individual Performance"	.7	6.3
"Quiet Environment with High Expectations"	2.2	0
No scorable response or blank	22.4	9.5
"Does this differ from what you would do if no handicapped student were present in your classroom?"		
Yes	32.1	39.7
No	56.7	52.4
No Response	11.2	7.9

Table 17

Adaptive Instruction: Elementary vs. Secondary Teachers' Reports of the Desirability of Various Instructional Adaptations for Handicapped Students and the Extent to which they are able to Make the Adaptation in their Classrooms[a]

	Desirability				Able to Do			
	Elementary		Secondary		Elementary		Secondary	
	Mean	Mode	Mean	Mode	Mean	Mode	Mean	Mode
1. Student experience success	6.36	7.0	6.36	7.0	4.96	5.0	4.92	6.0
2. Identify instructional modifications	6.17	7.0	6.05	7.0	4.55	4.0	4.95	5.0
3. Manage behavior or affect	6.30	7.0	*5.81	7.0	5.05	5.0	4.94	5.0
4. Modify curricula	5.87	7.0	5.82	6.0	4.59	5.0	4.86	5.0
5. Use alternative methods	6.42	7.0	*5.87	7.0	4.82	5.0	4.42	4.0
6. Use different materials	6.12	7.0	*5.63	7.0	4.69	5.0	*4.08	4.0
7. Use other goals	5.87	7.0	*5.21	6.0	4.76	5.0	*4.16	4.0
8. Use increased practice	6.25	7.0	5.95	7.0	5.15	6.0	4.95	6.0
9. Use alternative group placements	5.90	7.0	*5.32	7.0	4.74	6.0	*4.03	4.0
10. Adjust lesson pace	6.19	7.0	6.10	7.0	4.73	5.0	4.52	7.0
11. Monitor student errors	6.30	7.0	6.11	7.0	5.02	5.0	4.79	5.0
12. Modify tasks for no errors	5.58	7.0	5.21	5.0	4.24	4.0	*3.76	4.0
13. Monitor effectiveness of alternative interventions	5.82	7.0	5.49	7.0	4.35	4.0	4.12	4.0
14. Inform student of needs	5.74	7.0	5.77	6.0	5.02	4.0	5.02	4.0
15. Hold student accountable	6.51	7.0	6.66	7.0	5.72	7.0	5.95	7.0
Averages	6.09	7.0	5.82	6.7	4.8	5.0	4.6	4.9

[a]All 15 t-tests between "desirability" and "able to do" average ratings significant at .000. Elementary teacher sample sizes ranged from 126 to 132, and secondary sample sizes from 60 to 63 subjects.

*t-test between means of elementary vs. secondary teachers significant at .05 level.

student's individual rate of mastery, and informing students frequently of their instructional needs were viewed as equally desirable by elementary and secondary teachers. Holding the student accountable for performance and quality of work was ranked by both elementary and secondary teachers as being the most desirable adaptive instructional method.

Elementary level teachers generally also reported that they were better able, on the average, to incorporate adaptive instructional methods than were secondary level teachers. In some areas, elementary level teachers significantly differed from secondary level teachers in their ability to use adaptive instructional methods in the classroom. Other areas identified by t tests at the .05 level of significance were: using different materials to instruct failing students, using other goals to instruct failing students, using alternative group placements, and modifying tasks until students make no errors or only infrequent mistakes.

Elementary and secondary level regular education teachers reported with equivalent frequency an ability to use the adaptive instructional method of informing a student frequently of instructional need. Finally, both elementary and secondary level teachers ranked as their highest priority the ability to hold students accountable for their performance and quality of work.

Regional Comparisons

Data were further analyzed by examining results for each of the nine U.S. geographic divisions. These geographic regions display little diversity in many of the study's chief questions about instructional arrangements for mildly handicapped students used by regular education teachers. The distribution, by

region, of elementary versus secondary level regular education teachers is reported in Table 18.

Teachers' estimates of the socioeconomic status of their students are reported in Table 19. Generally, most geographical regions reported that the student populations they served represented a predominantly low-moderate to moderately-high range. Table 20 displays the average range in the number of students being served, by handicapping label, by regular education teachers' in each of the nine geographic divisions. In the West South Central region, one teacher reported an extremely high number of students with the LD label. It is unclear whether this reported figure of "75 students" is an outlier or an inaccuracy due to a misinterpretation of the item. The number of students reported as being served by categorical label, or caseload, in the nine geographical regions displays concordance with what would be expected regarding services provided to these students (i.e., higher numbers of LD students served in the mainstream than students classified as EBD or MR).

Use of other adult aides in classroom. The frequency of using another adult to assist in the classroom is reported in Table 21. The West North Central region displayed the greatest diversity in the use of another adult to aid instruction; the South Atlantic and Mountain states also reported the use of a variety of other adult aides in their classrooms. All other regions displayed limited diversity in the use of additional adults as supports to instruction. Furthermore, it was found that all regions displayed a greater percentage of respondents who reported that there would be no difference in their use of another adult as support in the classroom based on the presence of mildly handicapped students (see Table 22).

Table 18

Number of States in Each Region Represented by Elementary and Secondary Levels

	Elementary		Secondary	
New England	19	79.2%	5	20.8%
Middle Atlantic	7	38.9%	11	61.1%
East North Central	13	76.5%	4	23.5%
West North Central	19	61.3%	12	38.7%
South Atlantic	12	57.1%	9	42.9%
East South Central	11	91.7%	1	8.3%
West South Central	17	85.0%	3	15.0%
Mountain	21	60.0%	14	40.0%
Pacific	11	73.3%	4	26.7%

Table 19

Number of States by Regional Division Reporting Student Socioeconomic Status

	Low	Low-Moderate	Moderate	Moderate-High	High
New England	2	8	5	8	0
Middle Atlantic	0	6	9	3	0
East North Central	1	7	6	3	0
West North Central	0	16	9	5	1
South Atlantic	2	9	6	4	0
East South Central	2	3	6	1	0
West South Central	3	11	3	2	1
Mountain	8	14	8	5	0
Pacific	1	9	3	2	0

Table 20

Average Range of Handicapped Students on Teachers' Caseloads by Label and Regional Division

	LD	EBD	MMR	SP	Other
New England	1-13	1-3	0	1-3	2
Middle Atlantic	1-20	1-5	1-5	1	6
East North Central	1-14	1-5	1-4	1-4	1-2
West North Central	1-16	1-6	1-9	1-4	1-9
South Atlantic	1-10	1-4	1-10	1-10	1-2
East South Central	1-5	1-2	2-7	1-3	2-7
West South Central	1-75	1-6	1-5	1-5	1-2
Mountain	1-18	1-10	1-6	1-6	1-9
Pacific	1-6	1	1-3	1-4	0

Table 21

Number and Percentage of States Reporting Other Adult Educational Support by Regional Division

Other		Tutor	Aide	Volun-teer	Another Teacher	Coun-selor	No Other Adult	Stu-dent	Full Time Profes-sional
New England	N[a]	1	5	7	0	0	6	0	4
	%[b]	4.2	20.8	14.2	0.0	0.0	25	0.0	20.8
Middle Atlantic	N	1	2	0	0	0	12	0	2
	%	5.6	11.1	0.0	0.0	0.0	66.7	0.0	11.1
East North Central	N	0	3	2	0	0	7	0	2
	%	0.0	17.6	11.8	0.0	0.0	41.2	15.9	11.8
West North Central	N	2	5	2	3	1	11	0	1
	%	6.5	16.1	6.5	9.7	3.2	35.5	0.0	3.2
South Atlantic	N	0	2	1	3	0	7	1	2
	%	0.0	9.6	4.8	14.3	0.0	33.3	4.8	9.5
East South Central	N	1	1	1	0	0	7	0	1
	%	8.3	8.3	8.3	0.0	0.0	58.3	0.0	8.3
West South Central	N	1	1	3	0	0	10	0	4
	%	5.0	5.0	15.0	0.0	0.0	28.6	0.0	20.0
Mountain	N	1	5	4	6	0	10	0	4
	%	2.9	14.3	11.4	17.1	0.0	28.6	0.0	11.4
Pacific	N	1	3	0	0	0	3	0	5
	%	6.7	6.7	13.3	0.0	0.0	0.0	0.0	33.3

[a]Number of states

[b]Percentage of states responding

Table 22

Number of States Reporting "Would Practices Differ if No Handicapped Student was Present in the Classroom" (by Regional Division)

	Use of Other Adult		Size of Instructional Grouping		Method of Instruction		Degree of Structure	
	Yes	No	Yes	No	Yes	No	Yes	No
New England	6	13	8	13	8	14	4	17
Middle Atlantic	3	12	9	8	7	11	7	9
East North Cntrl.	5	10	3	14	6	11	6	9
West North Cntrl.	11	14	15	13	10	21	11	17
South Atlantic	3	11	10	8	7	11	4	13
East South Cntrl.	1	7	2	6	3	7	1	9
West South Cntrl.	6	10	7	11	9	11	11	8
Mountain	11	22	17	17	14	19	18	14
Pacific	4	9	2	11	5	9	4	11

Size of groups. In Table 23 the typical size of small groups used to provide instruction to students with mild handicaps is reported by geographic division. The West Mountain states displayed greater diversity than other regions in the size of instructional groupings of students with mild handicaps. However, all regions generally appeared to favor instructional groups of smaller size. It was found that some of these regions (Middle Atlantic, West North Central, and South Atlantic) did indicate that the size of the groups made a difference if a student with handicaps was present in the class (see Table 22).

Primary methods of instruction. The primary method of instruction employed with mildly handicapped students is reported, by region, in Table 24. The West North Central, West Mountain, and New England states display the greatest degree of diversity in instructional methods, with the East South Central states displaying the least diversity. The percentages reported from each region indicate that the primary method of instruction used with mildly handicapped students is the direct instructional method. Furthermore, it was found that all geographic regions showed that a greater percentage of teachers would not use different instructional methods when mildly handicapped students were present in the class (see Table 22).

Degree of structure reported by teachers in the nine regions is presented in Table 25. In all but two of the regions (East North Central and South Atlantic), more than 25% of the respondents indicated that the degree of structure in their classrooms was very high. The extent to which degree of structure would change if handicapped students were not present is shown in Table 22.

Adaptive instruction. In compiling the regional results for "desirability" and " ability to use" adaptive instructional methods in the classroom, teachers

Table 23

Number of States by Regional Division Reporting
Different Sizes of Instructional Groupings

		Size of Group								
		Ind	1-3	4-6	7-9	10-12	13-15	16-18	19-20	21+
New England	N[a]	3	5	2	1	0	0	0	0	0
	%[b]	12.5	20.8	8.3	4.1	0.0	0.0	0.0	0.0	0.0
Middle Atlantic	N	1	0	3	2	1	1	1	0	0
	%	5.6	0.0	16.7	11.1	5.6	5.6	5.6	0.0	0.0
East North Central	N	0	0	7	0	1	1	0	1	1
	%	0.0	0.0	41.2	0.0	5.9	5.9	0.0	5.9	5.9
West North Central	N	2	6	2	3	0	2	1	0	0
	%	6.5	19.4	6.5	9.7	0.0	6.5	3.2	0.0	0.0
South Atlantic	N	2	4	2	2	2	0	0	0	0
	%	9.5	19.0	9.5	9.5	9.5	0.0	0.0	0.0	0.0
East South Central	N	2	1	3	1	0	0	0	0	0
	%	16.7	8.3	25.0	8.3	0.0	0.0	0.0	0.0	0.0
West South Central	N	3	2	2	1	0	0	1	1	0
	%	15.0	10.0	10.0	5.0	0.0	0.0	5.0	5.0	0.0
Mountain	N	1	6	10	2	1	3	1	1	0
	%	2.9	17.1	28.6	5.7	2.9	8.6	2.9	2.9	0.0
Pacific	N	1	1	2	0	0	0	0	0	0
	%	6.7	6.7	13.3	0.0	0.0	0.0	0.0	0.0	0.0

[a]Number of states

[b]Percentage of states responding

Table 24

Number of States by Regional Division Reporting
Methods of Instruction

		Methods of Instruction						
		Direct	Discovery	Cooper-ative	Indepen-dent	Multi-Method	Tac-tile	Other
New England	N[a]	9	5	3	0	3	1	1
	%[b]	37.5	20.8	12.5	0.0	12.5	4.2	4.2
Middle Atlantic	N	9	1	3	1	2	0	0
	%	50.0	5.6	16.7	5.6	11.1	0.0	0.0
East North Central	N	10	0	2	2	1	0	0
	%	58.8	0.0	11.8	11.8	5.9	0.0	0.0
West North Central	N	15	1	4	2	4	1	1
	%	48.8	3.2	12.9	6.5	12.9	3.2	3.2
South Atlantic	N	12	0	3	1	1	0	1
	%	57.1	0.0	14.3	4.8	4.8	0.0	4.8
East South Central	N	10	0	0	0	1	0	0
	%	83.3	0.0	0.0	0.0	8.3	0.0	0.0
West South Central	N	17	0	1	0	1	0	0
	%	85.0	0.0	5.0	0.0	2.9	0.0	0.0
Mountain	N	17	4	4	1	5	0	1
	%	48.6	11.4	11.4	2.9	14.3	0.0	2.9
Pacific	N	12	0	0	0	1	0	1
	%	80.0	0.0	0.0	0.0	6.7	0.0	6.7

[a]Number of states

[b]Percentage of states responding

Table 25

Number of States by Regional Division Reporting Degree of Structure in Classroom for Handicapped Students

		Degree of Structure[a]								
		1	2	3	4	5	6	7	8	9
New England	N	10	4	1	1	0	1	0	0	2
	%	41.7	16.7	4.2	4.2	0.0	4.2	0.0	0.0	8.3
Middle Atlantic	N	9	2	0	0	3	0	1	1	0
	%	50.0	11.1	0.0	0.0	16.7	0.0	5.6	5.6	0.0
East North Central	N	3	3	0	3	0	1	0	1	0
	%	17.6	17.6	0.0	17.6	0.0	5.9	0.0	5.9	0.0
West North Central	N	9	4	2	2	2	4	2	0	0
	%	29.0	12.9	6.5	6.5	6.5	12.9	6.5	0.0	0.0
South Atlantic	N	13	1	0	0	1	1	2	0	0
	%	16.9	4.8	0.0	0.0	4.8	4.8	9.5	0.0	0.0
East South Central	N	6	2	2	0	0	0	0	0	0
	%	50.0	16.7	16.7	0.0	0.0	0.0	0.0	0.0	0.0
West South Central	N	12	0	2	2	2	0	0	0	0
	%	60.0	0.0	10.0	10.0	10.0	0.0	0.0	0.0	0.0
Mountain	N	14	8	1	2	1	1	0	0	0
	%	40.0	22.9	2.9	2.9	2.9	2.9	0.0	0.0	0.0
Pacific	N	4	3	1	1	2	0	0	2	0
	%	26.7	20.0	6.7	6.7	13.3	0.0	0.0	13.3	0.0

[a]Index - Degree of structure - Adjectives used by respondents

1. "Highly"/"Extremely"/"Very"
2. "Moderate"/"Much"/Alot"
3. "Low"/"Open"/"Flexible"
4. "Dependent an Instructional Techniques Learning Centers"
5. "Structure depends on disability served"
6. "Depends on curriculum/subject matter"
7. "Traditional/self-contained/structure with least distractions"
8. "Depends on learning style/individual performance"
9. "Quiet Environment with high expectations"

representing the regional divisions of New England, East South Central and West Mountain gave the highest ratings. In contrast, the East North Central states gave the overall lowest ratings. (see Table 26 for summary data.)

Discussion

There has been much discussion about the difficulties created for regular education teachers when students with handicaps are placed within their classrooms. Yet, we have little information on actual changes in instructional methods that occur when a student with handicaps is introduced into the classroom. The results of this survey of regular education teachers who have mildly handicapped students in their classrooms provide little indication that anything different occurs because of the presence of handicapped students in a classroom. For example, the number of adults used in the classroom differed from what it typically would be for only 26% of the respondents. Only 39% indicated that their grouping practices (typically, fewer than six students in a group) would change if there were no students with handicaps in the classroom; and only 36% indicated that their methods of instruction (usually, "direct instruction") would change. Only 36% indicated that the degree of structure in the classroom (typically described as "highly structured") would change if no handicapped students were present. These findings held true when comparisons were made between responses of elementary and secondary level teachers, although secondary teachers seem to encounter greater numbers of handicapped students during a school day. Secondary teachers also make less use of other adults in the classroom.

Adaptive instructional techniques were almost unanimously viewed as desirable, particularly holding the student accountable for work and altering

Table 26

Average Ranking by Regional Division for "Desirability" and "Ability to Do" Adaptive Instruction with Handicapped Students

	Regional Division[a]								
	1	2	3	4	5	6	7	8	9
Student Experience Success									
Desirability	6.6	6.8	5.6	6.4	6.6	6.6	6.6	6.2	6.4
Ability to Do	5.4	5.0	4.7	4.6	4.6	4.9	4.9	5.1	5.1
Alternative Instructional Modifications									
Desirability	6.4	6.3	5.4	5.9	6.4	6.4	5.9	6.3	6.1
Ability to Do	5.0	4.6	4.1	4.6	4.6	4.4	4.7	5.0	4.8
Management of Behaviors									
Desirability	6.4	5.9	5.4	5.8	6.2	6.6	6.7	6.1	6.4
Ability to Do	5.4	4.5	4.3	4.5	5.1	5.1	5.5	5.5	5.4
Curricula Modified									
Desirability	6.3	6.1	4.8	5.8	6.0	6.1	5.5	5.8	6.4
Ability to Do	5.3	4.7	4.3	4.5	4.4	4.8	4.2	4.9	5.1
Alternative Methods									
Desirability	6.7	6.0	5.8	6.2	6.4	5.8	6.3	6.3	6.3
Ability to Do	5.1	4.7	4.1	4.4	4.1	4.7	4.4	5.3	4.9
Different Materials									
Desirability	6.6	5.8	5.7	5.8	6.1	5.5	5.8	6.1	5.7
Ability to Do	5.5	4.5	4.2	4.1	4.0	4.4	4.2	4.8	4.4
Change Goals									
Desirability	6.1	4.8	5.5	5.5	6.0	5.8	5.7	5.7	5.6
Ability to Do	5.1	3.4	4.4	4.6	4.1	4.2	4.7	5.2	4.8
Increased Practice									
Desirability	6.3	6.4	6.1	6.1	6.2	6.6	6.3	5.9	6.1
Ability to Do	5.0	5.1	4.1	4.8	5.3	5.7	5.8	5.3	5.1
Alternative Placements									
Desirability	6.4	5.4	5.1	5.3	5.4	6.1	5.6	5.8	6.4
Ability to Do	5.2	4.3	3.2	4.1	3.6	5.3	4.6	5.0	5.4
Adjust Lesson Place									
Desirability	6.4	6.4	5.5	6.0	6.5	6.3	6.1	6.1	6.4
Ability to Do	5.2	5.0	4.7	3.8	4.2	4.9	5.1	5.1	4.4
Monitor Student Errors									
Desirability	6.2	6.3	6.2	6.0	6.5	6.4	6.3	6.2	6.4
Ability to Do	4.9	4.3	5.1	4.4	5.0	5.7	5.2	5.1	5.2
Modify Tasks									
Desirability	5.7	5.3	4.8	5.0	6.1	6.1	5.6	5.6	5.3
Ability to Do	4.5	3.4	3.6	3.8	4.0	4.6	4.2	4.6	3.9
Monitor Alternative Instruction									
Desirability	6.0	6.0	5.1	5.3	5.9	6.2	5.3	5.7	6.4
Ability to Do	5.0	4.1	2.8	3.7	3.8	5.2	4.4	4.7	4.8
Inform Student of Needs									
Desirability	5.2	5.4	6.2	5.6	6.0	6.1	5.7	5.9	5.7
Ability to Do	4.7	4.9	4.8	5.0	5.1	5.8	5.3	5.1	4.6
Hold Student Accountable									
Desirability	6.3	6.6	6.6	6.5	6.4	6.8	6.6	6.6	6.6
Ability to Do	5.8	5.9	5.8	5.8	5.4	5.9	5.8	6.0	5.5

[a]Key for Regional Divisions: 1. New England, 2. Middle Atlantic, 3. East North Central, 4. West North Central, 5. South Atlantic, 6. East South Central, 7. West South Central, 8. Mountain, and 9. Pacific

instruction so the student can experience success. The "ability to" ratings for the various techniques were ordered in a manner similar to the ratings of desirability, although these ratings were not as high. In addition, the ratings of elementary level teachers were slightly higher than the ratings of secondary level teachers, for both "desirability" and "ability to do."

The use of adults in the classroom, the degree of structure in the classroom, and the primary method of instruction were more variable in some regions than others. Particularly variable regions were those in the Northwestern and Northeastern sections of the nation.

The results of this survey suggest that regular education teachers either do not see a way to make the classroom environment different from what it would be without a handicapped student, or they are unable to implement potential changes for one reason or another. These types of findings once again emphasize the need to enter the regular education classroom to observe how handicapped students are spending their time in mainstream settings. The findings also raise issues relevant to recent pushes toward the reorganization of special education and regular education and their interactions (cf. Reynolds, Wang, & Walberg, 1987; Stainback & Stainback, 1984; Will, 1986).

The structural arrangements that teachers provide to handicapped students, use of other adults, size of small groups for instruction, primary methods of instruction and degree of structure in the classroom suggest that the more intensive the instructional setting, the better the educational experience. Aides, volunteers, or another teacher typically were identified as being used in the classroom to assist instruction. The use of another adult to aid instruction did not appear to differ when handicapped students were present in

the classroom, with 56% of the respondents reporting that there was no difference.

The size of small groups for instruction with handicapped students typically ranged from 4 to 6 and 1 to 3 students. Instructional groups are dependent on the ability of the student to interact in a socially appropriate fashion with other students, or to work cooperatively. Groups sizes appear to suggest that teachers are concerned with the manageability of the group. "Cooperative/group" was reported by 20.4% of the sample as a primary method of instruction, second to "direct instruction" which was reported by 60% of the sample as being the preferred method of instruction for handicapped students.

The overall degree of structure provided for instruction to handicapped students, reported by 40% of the teachers surveyed, suggested that the higher the degree of structure, the better. Few teachers maintained "flexible" or "low" levels of structure in the instruction of handicapped students. However, this appeared to not differ for many teachers (55.3%) who reported that the degree of structure would not change if handicapped students were not present in the classroom.

Adaptive instruction is apparently desirable when teaching handicapped students. Results show that elementary level teachers find they are more able to incorporate adaptive educational methods into their instructional interventions than secondary level teachers are. In any case, the use of adaptive instructional methods seems to be desirable at both the elementary and secondary levels, with teachers at both levels responding that the most desirable adaptive instructional approach is holding the student accountable for performance and quality of work.

The results of this survey provide a limited picture, yet an interesting one, of some of the practices employed by elementary and secondary level regular education teachers in teaching mildly handicapped students. Certainly these results suggest other questions. What is the impact of different instructional groupings in teaching students with mild handicaps? What impact do different adaptive educational approaches have on instruction? These questions and others definitely need to be addressed through continuing research.

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APPENDIX

COPY OF SURVEY

Name _____

School Address _____

Telephone Number ( ) _____

_____ Elementary _____ Secondary/Middle

1. Please indicate your teaching employment status.

   _____ Full-Time _____ Part-Time _____ Other, specify _____

2. How would you best estimate the socioeconomic level of the majority of students served in your school? (Mark only one response.)

   ____ Low ____ Low to Moderate ____ Moderate ____ Moderate to High ____ High

3. How many handicapped students in each of the following categories do you teach? (Count students' primary classification.)

   _____ Learning Disabled
   _____ Emotionally Disturbed/ Emotional/Behavior Disorders
   _____ Other, specify _____
   _____ Mildly Mentally Retarded
   _____ Speech Impaired

4. Please indicate the number of students you teach who are classified as "mildly handicapped" or "special needs" students.

   _____ Total number of students on your caseload classified as "mildly handicapped"

5. Structural Arrangements: Teachers sometimes believe that certain classroom structural arrangements work best for teaching mildly handicapped students. For each of the following structural arrangements, identify (1) what you do for the handicapped student(s) in your classroom, and (2) whether this differs from what you would do if you had no handicapped students in your class.

	(1) What do you do?	(2) Does this differ?
a. Use of other adults in the classroom.	a. _____	___ Yes ___ No
b. Size of the small group for instruction.	b. _____	___ Yes ___ No
c. Primary method of instruction (e.g., direct, discovery, cooperative independent work, etc.).	c. _____	___ Yes ___ No
d. Degree of structure.	d. _____	___ Yes ___ No

6. Adaptive Instruction: Teachers sometimes believe that instruction must be adapted for handicapped students who are in the regular education classroom. For each of the following statements indicate (1) the desirability of the adaptation, and (2) the extent to which you are able in your own classroom to make the adaptation (for whatever reason).

Please Circle Your Answer	(1) Desirabilty 1 2 3 4 5 6 7 Low High	(2) Able to Do 1 2 3 4 5 6 7 Low High
1. Altering instruction so student can experience success.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
2. Identifying alternative instructional modifications for teaching students.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
3. Identifying alternative ways to manage student behavior or affect.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
4. Modifying curricula in a variety of ways.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
5. Using alternative methods to instruct failing student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
6. Using different materials to instruct failing student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
7. Using other goals to instruct failing student.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
8. Using increased practice opportunities.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
9. Using alternative group placements.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
10. Adjusting lesson pace to meet student's rate of mastery.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
11. Monitoring of student's errors and prescribing activities to correct incorrect responses.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
12. Modifying tasks until student makes no errors or only infrequent mistakes.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
13. Monitoring effectiveness of alternative interventions.	1 2 3 4 5 6 7	1 2 3 4 5 6 7
14. Informing student frequently of his/her instructional needs.	1 2 3 4 5 5 7	1 2 3 4 5 6 7
15. Holding student accountable for his/her performance and quality of work.	1 2 3 4 5 6 7	1 2 3 4 5 6 7

Comments: _____

_____

Thank you for your cooperation. Please indicate whether you would be interested in receiving a brief summary of the results of this survey. ___ Yes ___ No

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